

**DECISION  
AND  
FINDING OF NO SIGNIFICANT IMPACT  
FOR THE ENVIRONMENTAL ASSESSMENT:  
MANAGEMENT OF  
AQUATIC RODENT DAMAGE IN MISSOURI**

**I. INTRODUCTION**

The U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services program (WS) receives and responds to a variety of requests for assistance from individuals, organizations, and agencies experiencing damage and other problems related to wildlife. Wildlife damage management is the alleviation of damage or other problems caused by or related to the presence of wildlife, and is recognized as an integral part of wildlife management (The Wildlife Society 1992). In November 2004, WS released an Environmental Assessment (EA) "*Management of Aquatic Rodent Damage in Missouri*". Ordinarily individual WS damage management actions are categorically excluded and do not require an environmental assessment (EA) (7 CFR 372.5(c), 60 Fed. Reg. 6000-6003, 1995). However, in order to facilitate planning, interagency coordination, and the streamlining of program management, and to clearly communicate with the public the analysis of cumulative impacts from WS's proposed program, the EA on alternatives for managing aquatic rodent damage in Missouri was prepared. The EA documented the need for aquatic rodent damage management (ARDM) in Missouri and assessed potential impacts of various alternatives to respond to aquatic rodent damage and associated risks to human health and safety. The EA and supporting documentation are available for review at the USDA-APHIS-WS State Office, 1714 Commerce Court, Suite C, Columbia, Missouri 65202. The EA is tiered to the WS programmatic Environmental Impact Statement (EIS) (USDA 1997). Copies of the EIS are available from the USDA/APHIS/WS, Operational Support Staff, 4700 River Road, Unit 87, Riverdale, MD 20737-1234.

The purpose of the proposed program is to reduce damage to property, crops, and natural resources and reduce risks to human health and safety resulting from the activities of beaver (*Castor canadensis*), muskrat (*Ondatra zibethica*), and nutria (*Myocastor coypus*) in Missouri. The EA was prepared in consultation with the Missouri Department of Conservation (MDC) to determine impacts on state wildlife populations and to ensure that the proposed actions are in compliance with relevant laws, regulations, policies, orders and procedures. All WS ARDM activities will be conducted consistent with the Endangered Species Act of 1973 including consultation with the United States Department of Interior, Fish and Wildlife Service (USFWS), and all other applicable Federal, State and local laws, regulations and policies.

**II. BACKGROUND**

The determination of a need for WS assistance with ARDM in Missouri is based on aquatic rodent damage to agricultural and natural resources, property, roads, bridges and railroads, and risks to public health and safety. Some of the types of damage that resource owners/managers seek to alleviate are: flooding of agricultural lands and roads; burrows weakening levies and water control structures; road bed failures due to impounded water, damage to commercial timber and ornamental trees and shrubs from flooding and cutting, structural degradation of storm water ditches, loss of or damage to habitat for native wildlife and fish species, and hazards to aviation at airports. Additionally, nutria are an introduced species and often compete for food and space with native wildlife. Details on the conflicts and benefits

associated with aquatic rodents in Missouri are provided in the EA. State agencies in Missouri provide little to no direct assistance to landowners with beaver, nutria, and muskrat damage management due to time and funding constraints and a lack of expertise. Similarly, private trappers generally prove inadequate for reducing beaver damage due to the high costs to landowners, low number of licensed trappers, and lack of expertise in damage management.

Missouri state statute (3CSR10-4.130) authorizes landowners or agents of the landowner to protect property, subject to federal regulations, from migratory birds and any other wildlife except deer, turkey, bear and any endangered species which beyond reasonable doubt is damaging property. With the exceptions noted, depredating wildlife may be captured or killed at any time without a permit. The MDC may also use aquatic rodent harvest regulations as a population management tool. Resource owners/managers can make their land available to trappers as a means of addressing damage problems. The WS EA only evaluated alternatives for WS involvement in ARDM and cannot change Missouri State Statutes and MDC policy permitting private landowners access to lethal and nonlethal alternatives for managing aquatic rodent damage. Therefore, a major overarching factor in determining how to analyze potential environmental impacts of WS' involvement in ARDM is that such management will likely be conducted by state, local government, or private entities that are not subject to compliance with NEPA if WS is not involved. This means that the Federal WS program has limited ability to affect the environmental outcome of ARDM in the state, except that the WS program is likely to have lower risks to nontarget species and less impact on wildlife populations than some alternatives available to resource owners/managers. Therefore, WS has limited ability to affect the environmental *status quo*. Despite this limitation to federal decision-making, this EA process is valuable for informing the public and decision-makers of the substantive environmental issues and alternatives for management of aquatic rodent damage.

### III. ISSUES ANALYZED IN THE EA

The following issues were identified as important to the scope of the analysis (40 CFR 1508.25) and each of the proposed alternatives was evaluated relative to its impacts on these issues.

- Effects on beaver, nutria, and muskrat populations,
- Effects on plants and other wildlife species, including T&E species,
- Effects on public and pet health and safety,
- Humaneness of methods to be used,
- Effects on wetlands,
- Economic losses to property, and
- Impacts to stakeholders, including aesthetics

An additional 5 issues were discussed but not addressed in detail for each alternative including:

- WS' impact on biodiversity;
- Wildlife damage management should not be conducted at taxpayer expense (wildlife damage management should be fee based);
- Aquatic rodent damage management should be managed by trappers and Nuisance Wildlife Control Agents;
- Breaching/removal of dams or use of water control structures; and
- Appropriateness of preparing an EA instead of an EIS for such a large area.

#### **IV. ALTERNATIVES ANALYZED IN DETAIL**

The following Alternatives were developed to analyze and respond to issues. Six additional alternatives were considered but not analyzed in detail. A detailed discussion of the effects of the Alternatives on the issues is analyzed in the EA.

##### **Alternative 1 – No WS Beaver, Nutria, or Muskrat Damage Management in Missouri**

This alternative would result in no assistance from WS in reducing beaver, nutria, or muskrat damage in Missouri. All requests for beaver, nutria, or muskrat damage management assistance would be referred to the MDC, local animal control agencies, or private businesses or organizations. Assistance may or may not be available from any of these entities.

##### **Alternative 2 – Only Lethal Beaver, Nutria, and Muskrat Damage Management**

Under this alternative, WS would only provide technical assistance and operational beaver, nutria, and muskrat damage management for lethal management techniques. Non-lethal capture devices such as snares, leghold traps, and cage traps could be used under this alternative. However, all aquatic rodents captured in non-lethal devices would subsequently be euthanized. The WS Decision Model would be used to select among the lethal management alternatives available to WS in order to meet the needs of the specific damage situation while minimizing potential harmful effects of damage management measures on humans, target and non-target species, and the environment. Requests for information regarding non-lethal management approaches would be referred to MDC, local animal control agencies, or private businesses or organizations. WS would not remove or breach beaver dams under this alternative. Individuals or agencies might choose to implement WS lethal recommendations on their own, implement non-lethal methods or other methods not recommended by WS, contract for WS assistance with lethal management techniques, use contractual services of private businesses, use volunteer services, or take no action. WS would provide assistance with lethal aquatic rodent damage management when requested on private or public property only after an *Agreement for Control* or other comparable document has been completed and funding has been secured. All WS aquatic rodent damage management would be consistent with other uses of the area and would comply with appropriate Federal, State and local laws.

##### **Alternative 3 - Fully Integrated Beaver, Nutria, and Muskrat Damage Management for all Public and Private Land (No Action/Proposed Action)**

The No Action alternative is a procedural NEPA requirement (40 CFR 1502.14(d)) and is a viable and reasonable alternative that could be selected and serves as a baseline for comparison with the other alternatives. The No Action alternative, as defined here, is consistent with guidance from the CEQ (CEQ 1981). In this guidance, the No Action alternative for situations where there is an ongoing management program may be interpreted as "no change" from current management direction or level of management intensity.

This alternative would continue the current ARDM program in the state of Missouri. An IWDM approach, including technical assistance and operational damage management services, would be implemented to reduce beaver, nutria and muskrat damage to property, roads, bridges, railroads, agricultural and natural resources, and risks to public health and safety. Damage management would be conducted on public and private property in Missouri where a need exists and when landowners/managers request WS assistance. The IWDM strategy would encompass the use of practical and effective non-lethal and lethal methods of preventing or reducing damage while

minimizing harmful effects of damage management measures on humans, target and non-target species, and the environment. The WS Decision Model (Slate et al. 1992; Section 3.2.3) would be used to select among the full range of management methods available when developing site-specific plans to address aquatic rodent damage. When appropriate, physical exclusion or habitat modification could be recommended and utilized to reduce aquatic rodent damage. Other non-lethal methods may include but are not limited to textural barriers, Clemson beaver pond levelers, beaver deceivers, and beaver exclusions devices. Aquatic rodents captured in non-lethal devices (leg-hold traps, snares, cage traps, etc.) would subsequently be euthanized. In other situations problem animals would be removed as humanely as possible using: body gripping traps (e.g., Conibear-type), snares, zinc phosphide bait for muskrats and nutria, leg-hold traps and shooting. When appropriate, beaver dams could be removed by using binary explosives or by hand. Preference would be given to practical and effective non-lethal methods, but non-lethal methods may not always be applied as a first response to each damage problem. The most appropriate response could be a combination of non-lethal and lethal methods, or there could be instances where application of lethal methods alone would be the most appropriate strategy. All WS aquatic rodent damage management would be consistent with other uses of the area and would comply with appropriate Federal, State and local laws.

#### **Alternative 4- Technical Assistance Only**

This alternative would only allow Missouri WS to provide technical assistance to individuals or agencies requesting beaver, nutria, or muskrat damage management in Missouri. WS would not remove or breach beaver dams under this alternative. The WS Decision Model (Section 3.2.3) would be used when recommending management alternatives that meet the needs of the specific damage situation. Landowners/managers could implement their own aquatic rodent damage management program, use contractual services of private businesses, use volunteer services, or take no action. This alternative would place the immediate burden of operational damage management work on the property owners and other Federal, State, or county agencies. All WS technical assistance for aquatic rodent damage management would be consistent with other uses of the area and would comply with appropriate Federal, State and local laws.

#### **Alternative 5- Non-lethal Beaver, Nutria, and Muskrat Damage Management**

Under this alternative, WS would only provide technical assistance and operational beaver, nutria, and muskrat damage management for non-lethal management techniques. The WS Decision Model (Section 3.2.3) would be used to select among the non-lethal management alternatives available to WS in order to meet the needs of the specific damage situation. Requests for information regarding lethal management approaches would be referred to MDC, local animal control agencies, or private businesses or organizations. Individuals or agencies might choose to implement WS non-lethal recommendations on their own, implement lethal methods or other methods not recommended by WS, contract for WS non-lethal damage management services, use contractual services or private businesses, use volunteer services, or take no action. Unwanted beaver dams could be removed or breached by hand or with binary explosives under this alternative. WS would provide assistance with non-lethal aquatic rodent damage management on private or public property only after an *Agreement for Control* or other comparable document has been completed and funding has been secured. All WS aquatic rodent damage management would be consistent with other uses of the area and would comply with appropriate Federal, State and local laws.

## V. MONITORING

The Missouri WS program will annually monitor the impacts of its actions relative to each of the issues analyzed in detail in the EA. This evaluation will include reporting the WS take of all target and nontarget species to help ensure no adverse impact on the viability of any target or non-target species including State and Federally listed threatened/endangered species. MDC expertise will be used to assist in determining impacts on state wildlife populations.

## VI. PUBLIC INVOLVEMENT

As part of this process, and as required by the CEQ and APHIS-NEPA implementing regulations, an announcement of the availability of the EA for public review and comment was made through "Notices of Availability" (NOA) published in the three major newspapers throughout the State and through direct mailings to parties that have specifically requested to be notified. Seventeen (17) letters were mailed to organizations, individuals, and public agencies announcing that the EA was available. WS received 3 requests for copies of the EA for review. Following the 34 day public review and comment period for the EA, MO WS did not receive any comments on the EA.

## VII. AGENCY AUTHORITIES

Under various acts of Congress, the Secretary of Agriculture is authorized to carry out wildlife control programs necessary to protect the Nation's agricultural and other resources. Among these are the Act of March 2, 1931, 46 Stat. 1468-69, 7 U.S.C. §§ 426-426b, as amended and Public Law No. 100-202, § 101(k), 101 Stat. 1329-331, 7 U.S.C. § 426c. Under the Act of March 2, 1931 and 7 U.S.C. § 426c, the Secretary of Agriculture may carry out these wildlife control programs alone, or may enter into cooperative agreements with States, local jurisdictions, individuals and public and private agencies whereby they may fund and assist in carrying out such programs. The Secretary has delegated the authority under both these Acts to APHIS. Within that agency, the authority resides with the Wildlife Services (WS) program.

The MDC under the direction of a Governor-appointed Conservation Commission is charged by the Legislature with the management of the State's wildlife. The MDC has the responsibility to manage all protected and classified wildlife in Missouri, except migratory birds and federally listed T/E species. The legal authorities of the Conservation Commission and the MDC are established in the Wildlife Code of Missouri. The Conservation Commission mission statement helps clarify and interpret the role of MDC in managing natural resources in Missouri. This statement is listed in the Missouri Wildlife Code Section 40(a).

## VIII. DECISION and RATIONALE

I have carefully reviewed the EA and the input resulting from the EA review process. I believe the issues identified in the EA are best addressed by selecting Alternative 3, *Continue the Current WS Adaptive Integrated Beaver, Nutria, and Muskrat Damage Management for all Public and Private Land (No Action/Proposed Action)*, and applying the associated standard operating procedures and monitoring measures discussed in Chapter 3 of the EA. Alternative 3 provides the best range of damage management methods considered practical and effective, addresses the issues, and accomplishes WS' Congressionally directed role in protecting the Nation's agricultural and other resources. WS policies and social considerations, including humane issues, will be considered while conducting ARDM. While Alternative 3 does not require non-lethal methods to be used, WS will continue to provide information and encourage the use of practical and effective non-lethal methods (WS Directive 2.101).

The analyses in the EA demonstrate that Alternative 3 provides WS the best opportunity to address the issues and had low impacts on target and non-target species. Alternative 3 best: 1) addresses the issues identified in the EA and provides safeguards for public safety, and 2) allows WS to meet its obligations to the MDC, and cooperating counties and residents of Missouri. Alternative 3 provides a mix of technical assistance, non-lethal and lethal methods. As a part of this Decision, the Missouri WS program will continue to provide biological and non-lethal management techniques information that could reduce damage. I have also adopted the EA as final because comments from public comments did not change the analysis.

### **FINDING OF NO SIGNIFICANT IMPACT**

The EA indicates that there will not be a significant impact, individually or cumulatively, on the quality of the human environment because of this proposed action, and that these actions do not constitute a major Federal action. I agree with this conclusion and therefore determine that an EIS will not be necessary or prepared. This determination is based on the following factors:

1. Aquatic rodent damage management, as conducted in Missouri is not regional or national in scope.
2. The proposed action will not have an impact on unique characteristics of the areas such as historical or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecological critical areas.
3. The proposed action will not significantly affect public health and safety. No accidents associated with WS aquatic rodent damage management are known to have occurred in Missouri.
4. The effects on the quality of the human environment are not highly controversial. Although there is opposition to WS damage management, this action is not controversial in relation to size, nature or effects.
5. Standard Operating Procedures adopted as part of the proposed action lessen risks to the public and prevent adverse effects on the human environment and reduce uncertainty and risks.
6. The proposed action does not establish a precedent for future actions with significant effects. This action would not set precedence for additional WS damage management that may be implemented or planned in Missouri.
7. The number of animals taken (both target and non-target) by WS annually is small in comparison to the total population. Adverse effects on wildlife or wildlife habitats would be minimal.
8. No significant cumulative effects were identified by this assessment or other actions implemented or planned within the area.
9. Aquatic rodent damage management would not affect cultural or historic resources. The proposed action does not affect districts, sites, highways, structures or objects listed in or eligible for listing in the National Register of Historic Places, nor will it cause a loss or destruction of significant scientific, cultural, or historical resources.

10. An evaluation of the proposed action and its effects on State and Federally listed T/E species determined that no significant adverse effects would be created for these species. The proposed action will fully comply with the Endangered Species Act of 1973, as amended. Consultations with the USFWS and the MDC have taken place and their input was used to develop Standard Operating Procedures for the proposed action.

11. This action would be in compliance with federal, State and local laws or requirements for damage management and environmental protection.

For additional information regarding this decision, please contact Ed Hartin, State Director, APHIS, WS, 1714 Commerce Court, Suite C, Columbia MO 65202, or by phone @ 573-449-3033.



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Date

1/18/05

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WS Directive 2.101. Selecting Wildlife Damage Management Methods.

WS Directive 2.105. The WS Integrated Wildlife Damage Management Program.